

WHAT IS CLAIMED IS:

1. A display device, comprising:
an illumination device that outputs a plurality of primary color light components having different luminescent colors; and
light modulation device that modulates the primary color light components output from the illumination device, the illumination device being capable of adjusting an emission spectra of the primary color light components.
2. The display device according to claim 1, the illumination device including a plurality of light sources having different luminescent colors, and each of the light sources including a plurality of light-emitting devices capable of independently adjusting outputs therefrom.
3. The display device according to claim 2, a color filter having a plurality of transmission spectra corresponding to the primary color light components output from the respective light sources being provided between the illumination device and the light modulation device, and an adjustment range of the emission spectrum of each of the light sources being within a range of the transmission spectrum of the color filter.
4. The display device according to claim 2, the light modulation device being provided to correspond to each of the plurality of light sources, and the display device further comprising a color composition device that composites the primary color light components output from the light modulation device, and
an adjustment range of the emission spectrum of each of the light sources is within a range of the transmission spectrum of the color composition device.
5. The display device according to claim 2, the illumination device including a light source and a color separation device that separates output light from the light source into a plurality of primary color light components, a plurality of light modulation devices being provided to correspond to the respective primary color light components, and a color composite device for composition of the primary color light components output from the respective light modulation device being provided,
the light source being able to adjust the emission spectrum of each primary color light component included in the output light within a range of the transmission spectra of the color separation device and the color composite device.
6. The display device according to claim 1, the illumination device including a light source and a band controlling device that adjusts the emission spectrum of light output from the light source and emitted to the light modulation device.

7. The display device according to claim 6, the band controlling device freely adjusting the transmission spectrum within a predetermined range.

8. The display device according to claim 6, the band controlling device freely converting converts a plurality of the transmission spectra.

9. The display device according to claim 1, further comprising:
an image analysis device that outputs a light control signal that adjusts the emission spectra of the primary color light components based on an image signal of a displayed image supplied to the light modulation device, and
a light controlling device that adjusts the emission spectra of the primary color light components based on the light control signal.

10. The display device according to claim 6, further comprising an image analysis device that outputs a band control signal that adjusts the emission spectra of the primary color light components based on an image signal of the displayed image supplied to the light modulation device,
the band controlling device adjusts the emission spectra of the primary color light components based on the band control signal.

11. The display device according to claim 1, further comprising a chromaticity correction device that corrects a white balance of the light output from the illumination device when adjustment of the emission spectra of the primary color light components is performed.

12. The display device according to claim 11,
the chromaticity correction device correcting the white balance in a low saturation region of the light output from the illumination device.

13. A display method applicable to a display device, comprising:
an illumination device capable of outputting a plurality of primary color light components having different luminescent colors and a light modulation device that modulates the primary color light components output from the illumination device,
emission spectra of the primary color light components output from the illumination device being adjusted according to contents of a displayed image supplied to the light modulation device.

14. A projector, comprising the display device according to claim 1 and projection device that projects light modulated by the light modulation device.